

# ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

1 10

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 05/19/2015		2. CONTRACT NO. (If any) EP-W-10-056		6. SHIP TO:	
3. ORDER NO. 0084		4. REQUISITION/REFERENCE NO. PR-OSWER-15-00168		a. NAME OF CONSIGNEE SRRPOD	
5. ISSUING OFFICE (Address correspondence to) SRRPOD US Environmental Protection Agency Superfund/RCRA Regional Procurement Operations 1200 Pennsylvania Ave, NW Washington DC 20460				b. STREET ADDRESS US Environmental Protection Agency William Jefferson Clinton Building 1200 Pennsylvania Avenue, N. W. Mail Code: 3805R	
				c. CITY Washington	d. STATE DC
				e. ZIP CODE 20460	
7. TO:				f. SHIP VIA	
a. NAME OF CONTRACTOR ICF INCORPORATED, L.L.C.				8. TYPE OF ORDER	
b. COMPANY NAME				<input type="checkbox"/> a. PURCHASE <input checked="" type="checkbox"/> b. DELIVERY	
c. STREET ADDRESS 9300 LEE HIGHWAY				REFERENCE YOUR:  Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.	
d. CITY FAIRFAX		e. STATE VA	f. ZIP CODE 220316050		
9. ACCOUNTING AND APPROPRIATION DATA See Schedule				10. REQUISITIONING OFFICE ORCR	
11. BUSINESS CLASSIFICATION (Check appropriate box(es))					12. F.O.B. POINT
<input type="checkbox"/> a. SMALL <input type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM <input type="checkbox"/> h. EDWOSB					Destination
13. PLACE OF		14. GOVERNMENT B/L NO.		15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date) 08/31/2015	
a. INSPECTION	b. ACCEPTANCE			16. DISCOUNT TERMS	

## 17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS Number: 072648579 The terms and conditions of contract EP-W-10-056 are hereby incorporated by reference. The contractor shall perform services in accordance with the attached statement of work dated May 19, 2015 (8 Continued ...					

SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOTAL (Cont. pages)
	21. MAIL INVOICE TO:						
	a. NAME RTP Finance Center						
	b. STREET ADDRESS (or P.O. Box) US Environmental Protection Agency RTP-Finance Center Mail Drop D143-02 109 TW Alexander Drive						
	c. CITY Durham						
	d. STATE NC	e. ZIP CODE 27711		f. AMOUNT \$49,900.00		17(i) GRAND TOTAL	

22. UNITED STATES OF AMERICA BY (Signature)  05/19/2015

23. NAME (Typed)  
Carolyn Mosinski  
TITLE: CONTRACTING/ORDERING OFFICER

ELECTRONIC SIGNATURE

**ORDER FOR SUPPLIES OR SERVICES  
SCHEDULE - CONTINUATION**

PAGE NO

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IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER 05/19/2015	CONTRACT NO. EP-W-10-056	ORDER NO. 0084
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ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
0001	<p>pages) and the contractor's proposal dated April 2, 2015.</p> <p>The task order funding amount is established at \$49,900 which the contractor is not authorized to exceed. Any expenditure above this amount is at the contractor's own risk. The task order is fully funded. This is a time and material task order.</p> <p>TOCOR: Laura Lopez Admin Office: SRRPOD US Environmental Protection Agency Superfund/RCRA Regional Procurement Operations 1200 Pennsylvania Ave, NW Washington DC 20460</p> <p>Accounting Info: 15-T-31P-303DD2-2585-HQ00BM00-1531SFP008-001 BFY: 15 Fund: T Budget Org: 31P Program (PRC): 303DD2 Budget (BOC): 2585 Job #: HQ00BM00 DCN - Line ID: 1531SFP008-001 Period of Performance: 05/19/2015 to 08/31/2015</p> <p>Analysis of Generation and Management for Waste Streams Containing Dioxin and Waste Streams containing Mercury</p> <p>The obligated amount of award: \$49,900.00. The total for this award is shown in box 17(i).</p>				49,900.00	

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$49,900.00

## **Task Order Statement of Work**

### **Analysis of Generation and Management for Waste Streams containing Dioxin and Waste Streams containing Mercury**

#### **OBJECTIVE**

This Statement of Work requests support for research and analysis of wastes containing dioxin and wastes containing mercury. These wastes were identified as potentially having waste management issues that could affect the National Capacity Assessment determinations that were presented in the 2014 National Capacity Assessment Report. This task will be completed in phases which are described in the Task Section of this Statement of Work.

#### **BACKGROUND**

Section 104(c)(9) of CERCLA requires states to provide an assurance of the availability of hazardous waste treatment or disposal capacity to manage wastes expected to be generated within their State for twenty years before EPA can expend any Superfund remedial action Trust funds in the States. EPA has finalized two National Capacity Assessment pursuant to the 1993 "Guidance for Capacity Assurance Planning" ("CAP Guidance", OSWER Directive #9010.02). The first assessment was finalized on November 1996 and the other on February 12, 2015. Office of Solid Waste (OSW, currently reorganized as Office of Resource Conservation and Recovery (ORCR)) in OSWER has supported this type of work since the late 1980's. ORCR has the expertise to conduct and evaluate the hazardous waste generation and management analyses necessary to support the Superfund Office to meet the CERCLA Section 104(c)(9) requirement. The assessment and the more detailed analyses conducted under this Task Order are based on data from the RCRAInfo system that is managed by ORCR as well as other data sources available that help define the generation and management of hazardous wastes. This work is related to the work conducted under Task Order #30.

#### **TASKS**

##### **TASK 1: Generation and Management Analyses for Recurrent Wastes Containing Dioxin**

The contractor shall support EPA by identifying generation and management trends of recurrent wastes for the last 25 years for all state and federal wastes, both hazardous and nonhazardous that can contain dioxin. The CAP Guidance defines recurrent waste as "waste generated from continuous and intermittent (e.g., leak collection and oil changes) processes, such as industrial processes. Recurrent hazardous waste includes all hazardous waste other than that generated from non-recurrent activities such as clean-ups." The contractor shall also determine the management trends for wastes containing dioxin and identify any innovative technologies being developed to management these wastes. Phone calls to generators and managers of dioxin wastes may be needed to verify the data in RCRAInfo and other information sources. The contractor shall support ORCR to define and conduct the following analyses, per state/US Territory, that provides analytical results that include:

- Identify all wastes streams and RCRA waste codes that can potentially contain dioxin.
- Lists of generators of the dioxin wastes throughout the years. The generators will be characterized using data such as NAICS codes, generator status (LQG, SQG, CESQG, or state generator), OECA Import/Export data base and ownership (federal, state, private facility).
- Location of the generation sources shall include a US map containing geographic details such as on or near Indian Lands, EJ communities, water sheds, and major ecological systems.
- Summarize and characterize all the dioxin waste streams generated using data sources such as the Biennial Report (BR) Data, state data, NPDES data, TRI. Characterization shall include waste form, source of generation, radioactivity, other constituents present in the waste streams, estimated levels of

hazardous constituents, distinguish primary versus secondary wastes (treatment residuals and derived-from wastes).

- Total volumes of recurrent wastes both hazardous and nonhazardous per state per, per industrial sector, per source and nationally and may be needed to provide context to percentage amounts of dioxin wastes that are generated on an annual basis.
- Evaluate the waste minimization information in the 2013 BR data and other sources to estimate the effects of applicable programs on dioxin waste generation.
- Management data for wastes containing dioxin shall be analyzed in terms of the Capacity Assurance Planning (CAP) management categories and will be identified as onsite management, offsite management at commercial facilities and offsite management at captive facilities.
- Capacity for the management of dioxin wastes will be identified for each unit managing dioxin wastes. Any treatment concerns and limitations will be documented such as the amount of other wastes managed in the units.
- A map showing the current generation and management behavior including the role of transfer facilities.
- Document all Federal, State and local solid and hazardous waste regulatory and economic issues that can affect generation and management decisions for dioxin wastes (Land Disposal Restrictions, delisting exemptions, siting laws, permit processes, landfill taxes, fuel costs, etc).
- Identify any innovative technologies being developed for management of wastes containing dioxin.
- Project the future generation and management of wastes containing dioxin through 2019, 2034, and 2039.
- A graphic describing the generation and management trends and projecting the next 20 years of generation and management.
- Document and address any concerns with the quality of the data used to conduct the analyses.
- Determine the need for additional data and analyses.
- Develop an Issue Paper and graphics on the findings of the analyses.

Before developing the Issue Paper described above, the contractor shall first provide a memo that provides the specific data sources that will be used for the analyses, data Table blueprints needed to organize the data in a manner that clearly shows how analytical results will be determined/illustrated, and descriptions of computing logic that will be used to extract data especially from large data systems such as RCRAInfo along with any recommendations for graphics and an outline for the memo. Once the content of the memo are approved the contractor shall provide data extractions for the States of Ohio, Massachusetts and Illinois to test that the programming logic is accurately extracting the data for the analyses. If these states do not generate and manage the recurrent wastes containing dioxin, then three other states shall be selected for the testing. Finalizing the computing extraction logic could be an iterative process of pulling data, analyzing preliminary results, revising computing logic, pulling data, analyzing results, redoing computing logic, etc. All assumptions and any issues or limitations concerning the data shall be provided and the TOCOR must approve the computing logic before the contractor performs data extractions nationally for all states. To help understand and verify the data results, the contractor shall conduct internet searches and make phone calls to experts. The phone calls are limited to no more than nine (9) entities when asking similar questions. All phone conversations and internet searches should be well documented in the Issue Paper.

## **TASK 2: Generation and Management Analyses for One-time/Cleanup Wastes Containing Dioxin**

The contractor shall support EPA by identifying generation and management trends of one-time or cleanup wastes for the last 25 years for all state and federal wastes, both hazardous and nonhazardous that can contain dioxin. One-time wastes are defined in the CAP Guidance as “any contaminated materials or treatment residuals (e.g., soils, sludges, debris, and equipment) generated by any of the following remediation or cleanup activities: (1) Superfund remedial actions; (2) state remedial actions; (3) Superfund removal actions; (4) corrective actions at RCRA hazardous waste management units; (5) closures of RCRA hazardous waste management units; and (6) other remediation activities, including those resulting from state and private emergency removals, environmental

audits and property transfers.” Cleanup wastes also include remediation of leaks from underground storage tanks. The contractor shall also determine the management trends for cleanup wastes containing dioxin. The contractor shall support ORCR by defining the issues and conducting the following analyses to provide analytical results that include:

- Using the list of dioxin wastes streams and RCRA waste codes developed in Task 1 determine if there are any additional cleanup wastes that can potentially contain dioxin.
- Per state/US territory develop lists of generators of dioxin cleanup wastes throughout the last 25 years. The generators will be characterized using data such as NAICS codes, generator status (LQG, SQG, CESQG, or state generator), OECA Import/Export data base and ownership (federal, state, private facility).
- Location of the generation sources shall include a US map containing geographic details such as on or near Indian Lands, EJ communities, water sheds, and major ecological systems.
- Summarize and characterize all the dioxin waste streams generated using data sources such as the Biennial Report (BR) Data, state data, NPDES data, TRI. Characterization shall include waste form, source of generation, radioactivity, other constituents present in the waste streams, estimated levels of hazardous constituents, distinguish primary versus secondary wastes (treatment residuals and derived-from wastes).
- Total volumes of cleanup wastes both hazardous and nonhazardous per state per, per industrial sector, per source and nationally and may be needed to provide context to percentage amounts of dioxin wastes that are generated on an annual basis.
- Evaluate the waste minimization information in the 2013 BR data and other sources to estimate the effects of applicable programs on the generation of dioxin cleanup wastes.
- Management data for cleanup wastes containing dioxin shall be analyzed in terms of the Capacity Assurance Planning (CAP) management categories and will be identified as onsite management, offsite management at commercial facilities and offsite management at captive facilities.
- Capacity for the management of dioxin wastes will be identified for each unit managing dioxin cleanup wastes. Any treatment concerns and limitations will be documented such as the amount of other waste types managed in the units.
- A map showing the current generation and management behavior including the role of transfer facilities.
- Document all Federal, State and local solid and hazardous waste regulatory and economic issues that have historically and can currently affect generation and management decisions for dioxin wastes (Land Disposal Restrictions, delisting exemptions, siting laws, permit processes, Brownfield’s tax incentives, fuel costs, etc).
- Identify any innovative technologies being developed for management of wastes containing dioxin.
- Project the future generation and management of wastes containing dioxin through 2019, 2034, and 2039. This will include identifying cleanup sites with known dioxin contamination and industrial sectors or areas of concern.
- A graphic describing the generation and management trends and projecting the next 20 years of generation and management. This information for future cleanups must be conducted on a state-by-state since it has the potential to affect the CAP determinations.
- Document and address any concerns with the quality of the data used to conduct the analyses.
- Determine the need for additional data and analyses.
- Develop an Issue Paper and graphics on the findings of the analyses.

Before developing the Issue Paper described above, the contractor shall first provide a memo that provides the specific data sources that will be used for the analyses, data Table blueprints needed to organize the data in a manner that clearly shows how analytical results will be determined/illustrated, and descriptions of computing logic that will be used to extract data especially from large data systems such as a RCRAInfo along with any recommendations for graphics and an outline for the memo. Once the content of the memo are approved the

contractor shall provide data extractions for the States of Ohio, Massachusetts and Illinois to test that the programming logic is accurately extracting the data for the analyses. If these states do not generate and manage cleanup wastes containing dioxin, then three other states shall be selected for the testing. Finalizing the computing extraction logic could be an iterative process of pulling data, analyzing preliminary results, revising computing logic, pulling data, analyzing results, redoing computing logic, etc. All assumptions and any issues or limitations concerning the data shall be provided and the TOCOR must approve the computing logic before the contractor performs data extractions nationally for all states. To help understand and verify the data results, the contractor shall conduct internet searches and make phone calls to experts. The phone calls are limited to no more than nine (9) entities when asking similar questions. All phone conversations and internet searches should be well documented in the Issue Paper.

### **TASK 3: Generation and Management Analyses for Recurrent Wastes Containing Mercury**

The contractor shall support EPA by identifying generation and management trends of recurrent wastes for the last 25 years for all state and federal wastes, both hazardous and nonhazardous that can contain mercury. The CAP Guidance defines recurrent waste as “waste generated from continuous and intermittent (e.g., leak collection and oil changes) processes, such as industrial processes. Recurrent hazardous waste includes all hazardous waste other than that generated from non-recurrent activities such as clean-ups.” The contractor shall also determine the management trends for wastes containing mercury and identify any innovative technologies being developed to manage these wastes. Phone calls to generators and managers of mercury wastes may be needed to verify the data in RCRAInfo and other information sources. The contractor shall support ORCR to define and conduct the following analyses, per state/US Territory, that provides analytical results that include:

- Identify all wastes streams and RCRA waste codes that can potentially contain mercury. Identify high level mercury wastes requiring retorting as the treatment standard separately from wastes that do not require recovery.
- Lists of generators of the mercury wastes throughout the years. The generators will be characterized using data such as NAICS codes, generator status (LQG, SQG, CESQG, or state generator), OECA Import/Export data base and ownership (federal, state, private facility).
- Location of the generation sources shall include a US map containing geographic details such as on or near Indian Lands, EJ communities, water sheds, and major ecological systems.
- Summarize and characterize all the mercury waste streams generated using data sources such as the Biennial Report (BR) Data, state data, NPDES data, TRI. Characterization shall include waste form, source of generation, radioactivity, other constituents present in the waste streams, estimated levels of hazardous constituents, distinguish primary versus secondary wastes (treatment residuals and derived-from wastes).
- Total volumes of recurrent wastes both hazardous and nonhazardous per state per, per industrial sector, per source and nationally and may be needed to provide context to percentage amounts of mercury wastes that are generated on an annual basis.
- Evaluate the waste minimization information in the 2013 BR data and other sources to estimate the effects of applicable programs on mercury waste generation.
- Management data for wastes containing mercury shall be analyzed in terms of the Capacity Assurance Planning (CAP) management categories and will be identified as onsite management, offsite management at commercial facilities and offsite management at captive facilities.
- Capacity for the management of mercury wastes will be identified for each unit managing mercury wastes. This analyses includes identifying all facilities that have submitted letters to DOE certifying that they will not sell elemental mercury internationally but will store elemental mercury until they can transfer it to the DOE long-term storage facility. Any treatment concerns and limitations will be documented such as the amount of other wastes managed in the units and uncertainty how long the private facilities will continue to accept mercury for the DOE storage facility.

- Determine how much mercury has been sent for long term storage before and after the Mercury Export Ban.
- Identify historical and current market international and domestic demand for elemental mercury. Illustrate trends for the demand over the last 25 years (especially before and after the Mercury Export Ban) along with the projected demand for the years 2019, 2034 and 2039.
- A map showing the current generation and management behavior including the role of transfer facilities.
- Document all Federal, State and local solid and hazardous waste regulatory and economic issues that can affect generation and management decisions for mercury wastes (Land Disposal Restrictions, delisting exemptions, siting laws, permit processes, landfill taxes, fuel costs, etc).
- Identify any innovative technologies being developed for management of wastes containing mercury.
- Project the future generation and management of wastes containing mercury through 2019, 2034 and 2039.
- A graphic describing the generation and management trends and projecting the next 20 years of generation and management.
- Document and address any concerns with the quality of the data used to conduct the analyses.
- Determine the need for additional data and analyses.
- Develop an Issue Paper and graphics on the findings of the analyses.

Before developing the Issue Paper described above, the contractor shall first provide a memo that provides the specific data sources that will be used for the analyses, data Table blueprints needed to organize the data in a manner that clearly shows how analytical results will be determined/illustrated, and descriptions of computing logic that will be used to extract data especially from large data systems such as RCRAInfo along with any recommendations for graphics and an outline for the memo. Once the content of the memo are approved the contractor shall provide data extractions for the States of Ohio, Massachusetts and Illinois to test that the programming logic is accurately extracting the data for the analyses. If these states do not generate and manage recurrent wastes containing mercury, then three other states shall be selected for the testing. Finalizing the computing extraction logic could be an iterative process of pulling data, analyzing preliminary results, revising computing logic, pulling data, analyzing results, redoing computing logic, etc. All assumptions and any issues or limitations concerning the data shall be provided and the TOCOR must approve the computing logic before the contractor performs data extractions nationally for all states. To help understand and verify the data results, the contractor shall conduct internet searches and make phone calls to experts. The phone calls are limited to no more than nine (9) entities when asking similar questions. All phone conversations and internet searches should be well documented in the Issue Paper.

#### **TASK 4: Generation and Management Analyses for One-time/Cleanup Wastes Containing Mercury**

The contractor shall support EPA by identifying generation and management trends of one-time or cleanup wastes for the last 25 years for all state and federal wastes, both hazardous and nonhazardous that can contain mercury. One-time wastes are defined in the CAP Guidance as “any contaminated materials or treatment residuals (e.g., soils, sludges, debris, and equipment) generated by any of the following remediation or cleanup activities: (1) Superfund remedial actions; (2) state remedial actions; (3) Superfund removal actions; (4) corrective actions at RCRA hazardous waste management units; (5) closures of RCRA hazardous waste management units; and (6) other remediation activities, including those resulting from state and private emergency removals, environmental audits and property transfers.” Cleanup wastes also include remediation of leaks from underground storage tanks. The contractor shall also determine the management trends for cleanup wastes containing mercury. The contractor shall support ORCR by defining the issues and conducting the following analyses to provide analytical results that include:

- Using the list of mercury wastes streams and RCRA waste codes developed in Task 3 determine if there are any additional cleanup wastes that can potentially contain mercury.

- Per state/US territory develop lists of generators of mercury cleanup wastes throughout the last 25 years. The generators will be characterized using data such as NAICS codes, generator status (LQG, SQG, CESQG, or state generator), OECA Import/Export data base and ownership (federal, state, private facility).
- Location of the generation sources shall include a US map containing geographic details such as on or near Indian Lands, EJ communities, water sheds, and major ecological systems.
- Summarize and characterize all the mercury waste streams generated using data sources such as the Biennial Report (BR) Data, state data, NPDES data, TRI. Characterization shall include waste form, source of generation, radioactivity, other constituents present in the waste streams, estimated levels of hazardous constituents, distinguish primary versus secondary wastes (treatment residuals and derived-from wastes).
- Total volumes of cleanup wastes both hazardous and nonhazardous per state per, per industrial sector, per source and nationally and may be needed to provide context to percentage amounts of mercury wastes that are generated on an annual basis.
- Evaluate the waste minimization information in the 2013 BR data and other sources to estimate the effects of applicable programs on the generation of mercury cleanup wastes.
- Management data for cleanup wastes containing mercury shall be analyzed in terms of the Capacity Assurance Planning (CAP) management categories and will be identified as onsite management, offsite management at commercial facilities and offsite management at captive facilities.
- Capacity for the management of mercury wastes will be identified for each unit managing mercury cleanup wastes. Any treatment concerns and limitations will be documented such as the amount of other waste types managed in the units.
- A map showing the current generation and management behavior including the role of transfer facilities.
- Document all Federal, State and local solid and hazardous waste regulatory and economic issues that have historically and can currently affect generation and management decisions for mercury wastes (Land Disposal Restrictions, delisting exemptions, siting laws, permit processes, Brownfield's tax incentives, fuel costs, etc).
- Identify any innovative technologies being developed for management of wastes containing mercury.
- Project the future generation and management of wastes containing mercury through 2019, 2034 and 2039. This will include identifying cleanup sites with known mercury contamination and industrial sectors or areas of concern.
- A graphic describing the generation and management trends and projecting the next 20 years of generation and management. This information for future cleanups must be conducted on a state-by-state since it has the potential to affect the CAP determinations.
- Document and address any concerns with the quality of the data used to conduct the analyses.
- Determine the need for additional data and analyses.
- Develop an Issue Paper and graphics on the findings of the analyses.

Before developing the Issue Paper described above, the contractor shall first provide a memo that provides the specific data sources that will be used for the analyses, data Table blueprints needed to organize the data in a manner that clearly shows how analytical results will be determined/illustrated, and descriptions of computing logic that will be used to extract data especially from large data systems such a RCRAInfo along with any recommendations for graphics and an outline for the memo. Once the content of the memo are approved the contractor shall provide data extractions for the States of Ohio, Massachusetts and Illinois to test that the programming logic is accurately extracting the data for the analyses. If these states do not generate and manage cleanup wastes containing mercury, then three other states shall be selected for the testing. Finalizing the computing extraction logic could be an iterative process of pulling data, analyzing preliminary results, revising computing logic, pulling data, analyzing results, redoing computing logic, etc. All assumptions and any issues or limitations concerning the data shall be provided and the TOCOR must approve the computing logic before the contractor performs data extractions nationally for all states. To help understand and verify the data results, the



contractor shall conduct internet searches and make phone calls to experts. The phone calls are limited to no more than nine (9) entities when asking similar questions. All phone conversations and internet searches should be well documented in the Issue Papers.

**TASK 5: National Summary Report for the Generation and Management of wastes Containing Dioxin and Waste Containing Mercury**

Once all the Issue Papers have been finalized the information from all four papers shall be combined into a Draft Report that summarizes all the state specific information and analytical results, limitations with data and analyses, and provides comprehensive management analyses for wastes containing mercury and wastes containing dioxin from a national perspective. When the contractor uses data from a large data base such as RCRAInfo, the final Report from the contractor shall include supporting documentation including programmed queries and datasets used for analyses in Microsoft Access format.

**DELIVERABLES**

All deliverables are due prior to August 31, 2015. The EPA TOCOR will issue a Technical Directive to specify a date for each of the following deliverables that do not mention timeframes for submission. Schedule dates are negotiable upon agreement by the TOCOR. For the item(s) above, if data usability or availability within the time frame of the work in this Task Order is an issue, the contractor shall present analytical results to the extent that data/information can be used and analyzed and/or provide a write-up of how it can be done if data or resources are limited.

<b>Task 1 and 3 Deliverables</b>	<b>Due Dates</b>
Memo with data sources, format for data Table blueprints, computing logic and ideas for graphics and an outline for the Issue Papers	Two Weeks from the date of task order award
Data extractions for the States of Ohio, Massachusetts and Illinois	Two weeks after receiving approval from TOCOR on the computing logic and Table Blueprint formats
Draft Issue Papers on the analytical findings	Four weeks after TOCOR approval of the test extractions for Ohio, Illinois and Massachusetts
Final Issue Papers on the analytical findings	Two weeks after receiving comments from TOCOR on draft papers

<b>Task 2 and 4 Deliverables</b>	<b>Due Dates</b>
Memo with data sources, format for data Table blueprints, computing logic and ideas for graphics and an outline for the Issue Papers	Two weeks from the date of task order award
Data extractions for the States of Ohio, Massachusetts and Illinois	Two weeks after receiving approval from TOCOR on the computing logic and Table Blueprint formats.

Draft Issue papers on the analytical findings	Four weeks after TOCOR approval of the test extractions for Ohio, Illinois and Massachusetts
Final Issue Papers on the analytical findings	Two weeks after receiving comments from the TOCOR on draft papers

<b>Task 5 Deliverables</b>	<b>Due Dates</b>
Draft Report that incorporate all four issue papers into a national summary Report	To be determined and specified in a TD issued by the TOCOR.
Final Report and all supporting documentation including datasets	To be determined and specified in a TD issued by EPA TOCOR

#### **TECHNICAL DIRECTION**

In accordance with EPAAR 1552.237-71 – Technical Direction, the Task Order Contracting Officer's Representative (TOCOR) will provide technical direction during performance of this task order.

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. 001		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO.	
5. PROJECT NO. (If applicable) RFQ-DC-15-00134		6. ISSUED BY SRRPOD		7. ADMINISTERED BY (If other than Item 6) CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) ICF INCORPORATED, L.L.C. 9300 LEE HIGHWAY FAIRFAX VA 220316050		(x) 9A. AMENDMENT OF SOLICITATION NO.		9B. DATED (SEE ITEM 11)	
CODE 072648579		FACILITY CODE		10A. MODIFICATION OF CONTRACT/ORDER NO. EP-W-10-056 0084	
				10B. DATED (SEE ITEM 13) 05/19/2015	

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.  
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

**12. ACCOUNTING AND APPROPRIATION DATA (If required)**

See Schedule

**13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

CHECK ONE X	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A. FAR 52.243-3 Changes
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

**E. IMPORTANT:** Contractor ☐ is not, ☒ is required to sign this document and return 1 copies to the issuing office.

**14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)**

DUNS Number: 072648579

The terms and conditions of contract EP-W-10-056 are hereby incorporated by reference.

TOCOR: Laura Lopez Max Expire Date: 02/29/2016

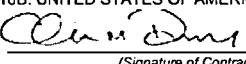
The purpose of this modification is to issue a no-cost extension in the Period of Performance to complete on-going work already approved pursuant to the existing Statement of Work. The new Period of Performance end date is now 02/29/2016. The total estimated price ceiling remains at \$49,900.00. This Task Order is fully funded at \$49,900.00. All other terms and conditions remain the same.

**LIST OF CHANGES:**

Reason for Modification : Change Order

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Christie M. Deskiewicz	
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA  (Signature of Contracting Officer)	16C. DATE SIGNED 08/31/2015

<b>CONTINUATION SHEET</b>	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE	OF
	EP-W-10-056/0084/001	2	2

NAME OF OFFEROR OR CONTRACTOR  
ICF INCORPORATED, L.L.C.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>Period Of Performance End Date changed from 31-AUG-15 to 29-FEB-16</p> <p>Maximum Potential Expiration Date changed to : 02/29/2016</p> <p>Delivery: 08/31/2015 Delivery Location Code: SRRPOD SRRPOD US Environmental Protection Agency William Jefferson Clinton Building 1200 Pennsylvania Avenue, N. W. Mail Code: 3805R Washington DC 20460 USA</p> <p>Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711</p> <p>FOB: Destination Period of Performance: 05/19/2015 to 02/29/2016</p>				

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE		PAGE OF PAGES 1   4	
2. AMENDMENT/MODIFICATION NO. 002		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO.	
5. PROJECT NO. (If applicable)		6. ISSUED BY SRRPOD		7. ADMINISTERED BY (If other than Item 6) CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) ICF INCORPORATED, L.L.C. 9300 LEE HIGHWAY FAIRFAX VA 220316050		(x)		9A. AMENDMENT OF SOLICITATION NO.	
CODE 072648579		FACILITY CODE		9B. DATED (SEE ITEM 11)	
		X		10A. MODIFICATION OF CONTRACT/ORDER NO. EP-W-10-056 0084	
				10B. DATED (SEE ITEM 13) 05/19/2015	

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.  
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

**12. ACCOUNTING AND APPROPRIATION DATA (If required)**

See Schedule

**13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
X	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

**E. IMPORTANT:** Contractor ☒ is not. ☐ is required to sign this document and return \_\_\_\_\_ copies to the issuing office.

**14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)**

DUNS Number: 072648579

TOCOR: Laura Lopez Max Expire Date: 02/28/2017

PIID: Analysis of Generation and Management for Waste Streams Containing Dioxin and Waste Streams Containing Mercury

The purpose of this administrative correction modification is to re-instate the previously executed bilateral modification 0002 to task order 0084 under EP-W-10-056, which was inadvertently deleted in the EPA acquisition system on 03 June 2016 by another Contracting Officer. Bilateral modification 0002, which extended the period of performance of subject task order thru 28 February 2017, was fully executed on 25 February 2016 and and is incorporated herein as an attachment to this modification.

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Faye Sas	
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA  ELECTRONIC SIGNATURE (Signature of Contracting Officer)	16C. DATE SIGNED 09/22/2016

## CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED  
EP-W-10-056/0084/002PAGE OF  
2 4NAME OF OFFEROR OR CONTRACTOR  
ICF INCORPORATED, L.L.C.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>All other terms and conditions remain unchanged.</p> <p>LIST OF CHANGES:</p> <p>Reason for Modification : Other Administrative Action</p> <p>Period Of Performance End Date changed from 29-FEB-16 to 28-FEB-17</p> <p>Total Amount for this Modification: \$0.00</p> <p>New Total Amount for this Version: \$0.00</p> <p>New Total Amount for this Award: \$49,900.00</p> <p>Maximum Potential Expiration Date changed to : 02/28/2017</p> <p>Payment:</p> <p>RTP Finance Center US Environmental Protection Agency RTP-Finance Center Mail Drop D143-02 109 TW Alexander Drive Durham NC 27711</p> <p>Period of Performance: 05/19/2015 to 02/28/2017</p>				

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE		PAGE OF PAGES 1   2	
2. AMENDMENT/MODIFICATION NO. 002		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO.	
6. ISSUED BY SRRPOD US Environmental Protection Agency Superfund/RCRA Regional Procurement Operations 1200 Pennsylvania Ave, NW Washington DC 20460		7. ADMINISTERED BY (If other than Item 6) CODE		5. PROJECT NO. (If applicable) RFQ-DC-15-00134	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) ICF INCORPORATED, L.L.C. 9300 LEE HIGHWAY FAIRFAX VA 220316050		(x) 9A. AMENDMENT OF SOLICITATION NO.		9B. DATED (SEE ITEM 11)	
CODE 072648579		FACILITY CODE		10A. MODIFICATION OF CONTRACT/ORDER NO. EP-W-10-056 0084	
				10B. DATED (SEE ITEM 13) 05/19/2015	

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.  
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)  
See Schedule

**13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

CHECK ONE X	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A. FAR 52.243-3 Changes; B.3 Period of the Contract
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF.
	D. OTHER (Specify type of modification and authority)

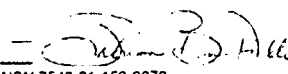

E. IMPORTANT: Contractor ☐ is not. ☒ is required to sign this document and return 1 copies to the issuing office.

**14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)**

DUNS Number: 072648579  
The terms and conditions of contract EP-W-10-056 are hereby incorporated by reference.  
TOCOR: Laura Lopez Max Expire Date: 02/28/2017  
The purpose of this modification is to extend the period of performance of this Task Order through 02/28/2017 at no cost. All other terms and conditions remain the same.

LIST OF CHANGES:  
Reason for Modification : Change Order  
Period Of Performance End Date changed from 29-FEB-16 to 28-FEB-17  
Maximum Potential Expiration Date changed to : 02/28/2017  
Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) Sabrina Brown-Diallo, Contracts Manager		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Christie M. Deskiewicz	
15B. CONTRACTOR/OFFEROR 	15C. DATE SIGNED 2016.02.25 02/25/2016	16B. UNITED STATES OF AMERICA 	16C. DATE SIGNED 2/25/16

NSN 7540-01-152-8070  
Previous edition unusable

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE	OF
	EP-W-10-056/0084/002	2	2

NAME OF OFFEROR OR CONTRACTOR  
ICF INCORPORATED, L.L.C.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>Delivery: 08/31/2015</p> <p>Delivery Location Code: SRRPOD</p> <p>SRRPOD</p> <p>US Environmental Protection Agency</p> <p>William Jefferson Clinton Building</p> <p>1200 Pennsylvania Avenue, N. W.</p> <p>Mail Code: 3805R</p> <p>Washington DC 20460 USA</p> <p>Payment:</p> <p>RTP Finance Center</p> <p>US Environmental Protection Agency</p> <p>RTP-Finance Center (AA216-01)</p> <p>109 TW Alexander Drive</p> <p>www2.epa.gov/financial/contracts</p> <p>Durham NC 27711</p> <p>FOB: Destination</p> <p>Period of Performance: 05/19/2015 to 02/28/2017</p>				



<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE		PAGE OF PAGES	
				1 5	
2. AMENDMENT/MODIFICATION NO.		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO.	
003		See Block 16C		PR-OLEM-16-00147	
6. ISSUED BY		CODE		7. ADMINISTERED BY (If other than Item 6)	
SRRPOD		SRRPOD		CODE	
US Environmental Protection Agency Superfund/RCRA Regional Procurement Operations 1200 Pennsylvania Ave, NW Washington DC 20460					
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)		(x)		9A. AMENDMENT OF SOLICITATION NO.	
ICF INCORPORATED, L.L.C. 9300 LEE' HIGHWAY FAIRFAX VA 220316050				9B. DATED (SEE ITEM 11)	
		x		10A. MODIFICATION OF CONTRACT/ORDER NO.	
				EP-W-10-056	
				0084	
				10B. DATED (SEE ITEM 13)	
CODE 072648579		FACILITY CODE		05/19/2015	

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.  
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required) Net Increase: \$49,942.00  
See Schedule

**13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
X	FAR 52.243-3: Changes - Time and Materials or Labor Hours
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not. ☒ is required to sign this document and return 1 copies to the issuing office.

**14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)**

DUNS Number: 072648579

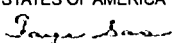
TOCOR: Laura Lopez Max Expire Date: 02/28/2017

PIID: Analysis of Generation and Management for Waste Streams Containing Dioxin and Waste Streams Containing Mercury

The purpose of this bilateral modification it to:

1. Incorporate within the Task Order Statement of Work the additional work under Tasks 1-4 as specified in Attachment (1);
  2. Approve and incorporate herein the contractor's cost estimate dated 16 September 2016 in the amount of \$49,942.00;
  3. Obligate incremental funding and modify the total funding ceiling of the task order;
- Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
		Faye Sas	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)		 (Signature of Contracting Officer)	09/26/2016

<b>CONTINUATION SHEET</b>	REFERENCE NO. OF DOCUMENT BEING CONTINUED EP-W-10-056/0084/003	PAGE OF 2 5
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NAME OF OFFEROR OR CONTRACTOR  
ICF INCORPORATED, L.L.C.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>4. Modify the total price ceiling of the task order.</p> <p>Funding in the amount of \$49,942.00 is obligated to this task order, increasing the funding ceiling by \$49,942.00, from \$49,900.00 to \$99,842.00 which the contractor is not authorized to exceed. The contractor exceeds the funding ceiling at its own risk.</p> <p>As an equitable adjustment for the subject changes, the task order ceiling price is hereby increased by \$49,942.00, from \$49,900.00 to \$99,842.00. By signing, the contractor hereby releases the Government from any and all liability for further equitable adjustments attributable to the work specified under this change order. Contractor incurred expenses shall not exceed the task order ceiling price at \$99,842.00.</p> <p>This time and materials task order is fully funded thru its completion date of 28 February 2017.</p> <p>COR: Laura Lopez</p> <p>LIST OF CHANGES: Reason for Modification : Change Order Total Amount for this Modification: \$49,942.00 New Total Amount for this Version: \$99,842.00 New Total Amount for this Award: \$99,842.00 Obligated Amount for this Modification: \$49,942.00 New Total Obligated Amount for this Award: \$99,842.00 CHANGES FOR LINE ITEM NUMBER: 1 Total Amount changed from \$49,900.00 to \$99,842.00 Obligated Amount for this modification: \$49,942.00</p> <p>NEW ACCOUNTING CODE ADDED: Account code: 16-T-31P-303DD2-2585-HQ00BM00-1631SFP009-001 Beginning Fiscal Year 16 Ending Fiscal Year Fund (Appropriation) T Budget Organization 31P Program (PRC) 303DD2 Budget (BOC) 2585 Job # (Site/Project) HQ00BM00 Continued ...</p>				

## CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED  
EP-W-10-056/0084/003PAGE OF  
3 5NAME OF OFFEROR OR CONTRACTOR  
ICF INCORPORATED, L.L.C.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>Cost Organization DCN-LineID 1631SFP009-001 Quantity: 0 Amount: \$49,942.00 Percent: 0 Subject To Funding: N Payment Address: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711</p> <p>Delivery: 02/28/2017 Delivery Location Code: SRRPOD SRRPOD US Environmental Protection Agency William Jefferson Clinton Building 1200 Pennsylvania Avenue, N. W. Mail Code: 3805R Washington DC 20460 USA</p> <p>Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711</p> <p>FOB: Destination Period of Performance: 05/19/2015 to 02/28/2017</p>				

**Analysis of Generation and Management for Waste Streams containing Dioxin and Waste Streams containing Mercury**

**Modification to Task Order #84 under Contract # EP-W-10-056**

U.S. EPA TOCOR: Laura L Lopez, OLEM/ORCR/PIID/ICAB

Email: [lopez.laura@epa.gov](mailto:lopez.laura@epa.gov)

Phone Number: 703-308-8482

**Performance Period of Task Order 84:**

The end date to the performance period was extended to February 28, 2017.

**OBJECTIVE OF INTENDED MODIFICATION:**

The primary purpose of this Task Order is to help States comply with the CERCLA 104(c)(9) hazardous waste management capacity assurance requirement so they are eligible to receive Superfund money for remedial actions. Last year, EPA conducted an assessment of national hazardous waste demand on management capacity and determined that the demand from wastes containing mercury and wastes containing dioxin needed further study. The intended modification to task order 84 provides EPA with continuous contractor support to finish the analytical work associated with Task Order 84 through its completion date of February 28, 2017.

**SCOPE OF WORK FOR MODIFICATION:**

**TASKS 1 and 2: Generation and Management Analyses for Wastes Containing Dioxin**

Additional work under Task 1 and 2: The contractor shall provide the SQL language for all the data queries used to develop for the data bases and reports needed to compile the data necessary to project the future generation and management of wastes containing dioxin through 2019, 2034 and 2039. Automating these analyses will help provide cost savings to the government for future capacity analyses work. The contractor shall also configure two GIS base maps with the dioxin management facilities and generators of dioxin wastes along with Geo-platform layers or data graphics that may include illustrating TRI dioxin releases, ecosystems, EJ populations, location of sensitive areas like schools and hospitals, sources of drinking water, pop-up data about management facilities, etc. One map should portray historical information about dioxin generation and management, and the other map should illustrate the current generation and management information. The data "story" format should be used to help the user understand the analytics and the data trends from past to present. The maps shall follow the EPA metadata style guide and standards necessary to share the data with the public. The maps will be included with the draft issue Papers for Tasks 1 and 2.

**TASKS 3 and 4: Generation and Management Analyses for Wastes Containing Mercury**

Additional work under Tasks 3 and 4: The contractor shall provide the SQL language for all the data queries used to develop for the data bases and reports needed to compile the data necessary

to project the future generation and management of wastes containing dioxin through 2019, 2034 and 2039. Automating these analyses will help provide cost savings to the government for future capacity analyses work. The contractor shall also configure two GIS base maps with the mercury management facilities and generators of mercury wastes along with Geo-platform layers and data graphics that may include TRI mercury releases, ecosystems, EJ populations, location of sensitive areas like schools and hospitals, sources of drinking water, pop-up data about management facilities, etc. One map should portray historical information about mercury generation and management, and the other map should illustrate the current generation and management information. The data "story" format and associated graphics should be used to help the user understand the analytics and the data trends from past to present. The maps shall follow the EPA metadata style guide and standards necessary to share the data with the public. The maps will be included with the draft issue Papers for Tasks 3 and 4.

## **DELIVERABLES**

The additional maps and data graphics will be submitted with the draft Issue Papers and any EPA comments will be incorporated into the final Issue Papers. EPA TOCOR will issue a technical directive to specify the deliverable due dates for the SQL query language for the data base and data reports. The contractor shall deliver at least one draft and one final draft for each deliverable specified in the technical direction.

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>			1. CONTRACT ID CODE		PAGE OF PAGES 1      2									
2. AMENDMENT/MODIFICATION NO. 004		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)								
6. ISSUED BY SRRPOD US Environmental Protection Agency Superfund/RCRA Regional Procurement Operations 1200 Pennsylvania Ave, NW Washington DC 20460		CODE SRRPOD		7. ADMINISTERED BY (If other than Item 6)  CODE										
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)  ICF INCORPORATED, L.L.C. 9300 LEE HIGHWAY FAIRFAX VA 220316050				(x) 9A. AMENDMENT OF SOLICITATION NO.										
				9B. DATED (SEE ITEM 11)										
				x 10A. MODIFICATION OF CONTRACT/ORDER NO. EP-W-10-056 0084										
				10B. DATED (SEE ITEM 13) 05/19/2015										
CODE 072648579		FACILITY CODE												
<b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>														
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.														
12. ACCOUNTING AND APPROPRIATION DATA (If required) See Schedule														
<b>13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.</b>														
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:10%;">CHECK ONE</td> <td>A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.</td> </tr> <tr> <td></td> <td>B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).</td> </tr> <tr> <td style="text-align: center;">X</td> <td>C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: Mutual Agreement of the Parties</td> </tr> <tr> <td></td> <td>D. OTHER (Specify type of modification and authority)</td> </tr> </table>							CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.		B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).	X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: Mutual Agreement of the Parties		D. OTHER (Specify type of modification and authority)
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.													
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).													
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: Mutual Agreement of the Parties													
	D. OTHER (Specify type of modification and authority)													
<b>E. IMPORTANT:</b> Contractor <input type="checkbox"/> is not. <input checked="" type="checkbox"/> is required to sign this document and return <u>1</u> copies to the issuing office.														
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) DUNS Number: 072648579 TOCOR: Laura Lopez Max Expire Date: 02/28/2018														

The purpose of this modification is to extend the period of performance of this task order through 28 February 2018 at no additional cost to the Government. All other terms and conditions remain unchanged.

**LIST OF CHANGES:**

Reason for Modification : Supplemental Agreement for work within scope  
 Period Of Performance End Date changed from 28-FEB-17 to 28-FEB-18  
 Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Faye Sas	
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA  ELECTRONIC SIGNATURE (Signature of Contracting Officer)	16C. DATE SIGNED 02/22/2017

<b>CONTINUATION SHEET</b>	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE	OF
	EP-W-10-056/0084/004	2	2

NAME OF OFFEROR OR CONTRACTOR  
ICF INCORPORATED, L.L.C.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>Total Amount for this Modification: \$0.00  New Total Amount for this Version: \$0.00  New Total Amount for this Award: \$99,842.00  Maximum Potential Expiration Date changed to :  02/28/2018</p> <p>Payment:</p> <p>RTP Finance Center  US Environmental Protection Agency  RTP-Finance Center  Mail Drop D143-02  109 TW Alexander Drive  Durham NC 27711</p> <p>Period of Performance: 05/19/2015 to 02/28/2018</p>				

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE		PAGE OF PAGES 1 4	
2. AMENDMENT/MODIFICATION NO. 002		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO.	
5. PROJECT NO. (If applicable)		6. ISSUED BY SRRPOD		7. ADMINISTERED BY (If other than Item 6) CODE	
SRRPOD US Environmental Protection Agency Superfund/RCRA Regional Procurement Operations 1200 Pennsylvania Ave, NW Washington DC 20460		8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)  ICF INCORPORATED, L.L.C. 9300 LEE HIGHWAY FAIRFAX VA 220316050		9A. AMENDMENT OF SOLICITATION NO.  9B. DATED (SEE ITEM 11)  10A. MODIFICATION OF CONTRACT/ORDER NO. EP-W-10-056 0084 10B. DATED (SEE ITEM 13) 05/19/2015	
CODE 072648579		FACILITY CODE			

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.  
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

**12. ACCOUNTING AND APPROPRIATION DATA (If required)**

See Schedule

**13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
X	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

**E. IMPORTANT:** Contractor ☒ is not. ☐ is required to sign this document and return \_\_\_\_\_ copies to the issuing office.

**14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)**

DUNS Number: 072648579

TOCOR: Laura Lopez Max Expire Date: 02/28/2017

PIID: Analysis of Generation and Management for Waste Streams Containing Dioxin and Waste Streams Containing Mercury

The purpose of this administrative correction modification is to re-instate the previously executed bilateral modification 0002 to task order 0084 under EP-W-10-056, which was inadvertently deleted in the EPA acquisition system on 03 June 2016 by another Contracting Officer. Bilateral modification 0002, which extended the period of performance of subject task order thru 28 February 2017, was fully executed on 25 February 2016 and is incorporated herein as an attachment to this modification.

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Faye Sas	
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA  ELECTRONIC SIGNATURE (Signature of Contracting Officer)	16C. DATE SIGNED 09/22/2016



## CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED  
EP-W-10-056/0084/002PAGE OF  
2 4NAME OF OFFEROR OR CONTRACTOR  
ICF INCORPORATED, L.L.C.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>All other terms and conditions remain unchanged.</p> <p>LIST OF CHANGES: Reason for Modification : Other Administrative Action Period Of Performance End Date changed from 29-FEB-16 to 28-FEB-17 Total Amount for this Modification: \$0.00 New Total Amount for this Version: \$0.00 New Total Amount for this Award: \$49,900.00</p> <p>Maximum Potential Expiration Date changed to : 02/28/2017</p> <p>Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center Mail Drop D143-02 109 TW Alexander Drive Durham NC 27711</p> <p>Period of Performance: 05/19/2015 to 02/28/2017</p>				